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09/879,958	06/14/2001	Kazuo Sano	4468-016	4198

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EXAMINER

AMINI, JAVID A

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/879,958

Applicant(s)

SANO ET AL.

Examiner

Javid A. Amini

Art Unit

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date November 15, 2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

***Response to Arguments***

Applicant's arguments filed 2/03/2005 have been fully considered but they are not persuasive.

Applicant started the arguments from page 11, and pages 7-10 are presenting the invention.

Applicant on page 11 of remarks regarding the reference McGregor argues that is directed to a system for color matching between different printers or the like.

Examiner's reply: McGregor on fig. 15 illustrates clearly not only for color matching between different printers but also in col. 18 lines 59-67 discloses a plurality of destination devices 1516, 1517, 1518, 1519, 1520, 1521. The destination devices display or store colors in respective color spaces. Also, the destination devices may include virtual devices such as the device 1516 and the device 1517 which represent colors in the color spaces RGB and XYZ, respectively. The destination devices also include real devices such as printer 1518, a CRT1 1519, a CRT2 1520, and other real and virtual devices 1521.

Applicant on the same page last paragraph argues that the reference McGregor shown in figs. 15-16 a translator 1515 receives a signal defining the original color from a source device.

Examiner's reply: The box 1515 is implemented (e.g. a computer program) by a person skilled in the art. This method contains high precision matching color and prevents to have a different result, when a user has a partially or totally unable to distinguish certain colors (e.g. colorblind problem).

Applicant on page 12, lines 3-13, argues that McGreggor's source color devices can not be limited to the color chips used in the present invention.

Examiner's reply: It is very obvious for a person skill in the art to be able to scan the color chip using fig. 15 box 1513 (i.e. scanner) to obtain the color translation and store it in the profile storage area.

Applicant on the same page lines 14-31 argues regarding the reference Tsukuda, the color reproduction table is a database of data of color chips and corresponding ink compositions. According to the present invention, the data of color chips and colorants are stored in a server in advance.

Examiner's reply: Applicant arguments are not clear to represent the main invention. The signal of a color is contained the characteristics of that color, and they are stored in a computer's storage area.

Applicant on page 13 lines 16-20 argues similar matter as previously argued. That the reference McGreggor does not disclose the specification of the differences of the color specification values of the color chip and target color based on the visual perception of both by a user.

Examiner's reply: it is obvious for a person skill in the art to be able to scan the color chip using fig. 15 box 1513 (i.e. scanner) to obtain the color translation and store it in the profile storage area. E.g. in fig. 15 if number 1514 is called color chip's color (i.e. the color chip is already scanned into a computer as a labeled 1514), and a person skill in the art designed a computer codes to correlates between the given color chip's color and desired target color. The reference McGreggor in col. 11 lines 5-10 teaches all colors in the graphics system are defined in

a device-independent way. A color is matched when translated from one color space to another. The color may be matched using calorimetric, that is, using the algorithmic definition of the color provided by the color space. Or, it may be matched perceptually, so that the color appears to the eye to best match the desired color.

Applicant on page 14 lines 9-17 argues McGregor does not display an image for a user to specify differences between color specification values corresponding to a color chip and color specification values corresponding to a target color.

Examiner's reply: McGregor displays an object with RGB colors and converted to target color (i.e. display, printer or etc.) see col. 1 lines 37-46. McGregor in figs. 18 and 19 provides typical TRC curves. Fig. 18 is a TRC for one colorant, e.g., red, for a typical CRT monitor. The profile will include a TRC for each primary colorant of each real source and destination device. Fig. 19 represents a TRC for typical printer ink. The TRCs are measured tables with a finite number of samples. Interpolation is used to complete the range of the TRC during use.

Applicant on page 15 in first and second paragraphs argues that McGreggor's invention interpolates method automatically and measure data of color samples. And in the present invention a mathematical calculation is performed after the user specifies the differences between color specification values corresponding to a color chip and color specification values corresponding to a target color.

Examiner's reply: The argument is similar to the previous arguments. In fig. 15 of McGregor illustrates number of source devices (i.e. the color chip is already scanned into a computer as a labeled 1514) that can be selected different destination devices for appropriate targeted color.

Art Unit: 2672

Applicant on page 15 lines 13-15 argues that Holub does not overcome the deficiencies with respect to the other two references.

Examiner's reply: McGreggor and Tsukada do not teach server storing color data, but Holub teaches controlling color reproduction at multiple sites (network).

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1-5, 6-26 recites the limitation "the identified color" in line 5, claim 1 and line 7 claim 12. There is insufficient antecedent basis for this limitation in the claim.

Question: How does the present invention work, when a user has a partially or totally unable to distinguish certain colors (e.g. colorblind problem)?

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-4, 6-26 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The term "the identified color" in line 5, claim 1 and line 7 claim 12 is not defined clearly in the specification to show how the color chip is identified differences between color chip and target color.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4,6- 26 rejected under 35 U.S.C. 103(a) as being unpatentable over McGregor et al. (hereinafter is referred as a McGregor), and Tsukada and further in view of Holub.

1. Claim 1.

McGregor in figs. 1 and 2 illustrates a system for calculating a blending ratio; see McGregor in col. 14 lines 48-51 teaches the destination component is replaced by the average of the source component and destination component, using the operand component to specify the ratio.

McGregor in figs. 22-23 illustrates a data receiving for identifying source and destination color profiles see item 23120 in fig. 23. McGregor in fig. 23 item 23120 teaches a colorimeter device, which would specify differences between color specification values corresponding to the source color (color chip) and color specification values corresponding to a destination color (desired target color). McGregor in col. 20, lines 5-12 teaches Figs. 18 and 19 provide typical TRC curves. Fig. 18 is a TRC for one colorant, e.g., red, for a typical CRT monitor. The profile will include a TRC for each primary colorant of each real source and destination device. Fig. 19 represents a TRC for typical printer ink. The TRCs are measured tables with a finite number of samples. Interpolation is used to complete the range of the TRC during use. McGregor does not

Art Unit: 2672

explicitly specify a color chip, however McGregor in fig. 1 illustrates source color store item

13. Tsukada in fig. 1 items 20 and 21 illustrates a similar function as the color chip data.

McGreggor and Tsukada do not teach server storing color data, but Holub teaches controlling

color reproduction at multiple sites (network). Thus, it would have been obvious to one of

ordinary skill in the art at the time the invention was made to incorporate the teaching of

Tsukada and Holub into McGregor in order to combined items 21 and 201 in fig. 11 of

Tsukada, inserted them between items 32 and 33 in McGregor's fig. 2 to be able to have the

color ink (colorant) capability. Also incorporating fig. 3A of Holub to have access to the system

100, which has a network 11 having a pipe 11a through which multiple nodes (or sites) of

network 11 can be linked for data flow between nodes. Network 11 may be a telecommunication

network, WAN, LAN (with a server) or Internet based.

2. Claim 2.

See rejection of claim 1.

3. Claim 3.

See rejection of claim 1.

4. Claim 4.

McGreggor in fig. 16 items 1634 and 1635 illustrates the step of "The CCM calculating system

as claimed in claim 1, further comprising a correcting means for correcting said color

specification values displayed on said displaying means",

5. Claim 6.

Art Unit: 2672

McGreggor in fig. 3 item 303 “The CCM calculating system as claimed in claim 1, further comprising blending ratio displaying means for displaying said calculated blending ratio of colorants”,

6. Claim 7.

Holub in figs. 4B and 4C illustrates a method to calculate the amount of colorant. It is obvious to multiply the cost of the colorant to the amount of colorant to calculate the total cost of colorant.

“The CCM calculating system as claimed in claim 6, wherein said color data includes data of costs of colorants, said calculating means provides a plurality of said blending ratios of colorants and calculates the total cost of each of said calculated blending ratios based on said data of costs of colorants, and said blending ratio displaying means displays said plurality of blending ratios arranged in the descending order or the ascending order in terms of said total cost”,

7. Claims 9 and 20.

Tsukada in fig. 11 item 201 specifically illustrates items 9 and 8. “The CCM calculating system as claimed in claim 1, wherein said color data is provided based on data obtained by the measurement by means of a spectrophotometer”, the step is obvious because a spectrophotometer is for measuring the relative intensities of light in different parts of a spectrum.

8. Claims 10 and 21.

See rejection of claim 1. “The CCM calculating system as claimed in claim 1, wherein said color data is provided based on data obtained by the measurement by means of a colorimeter”, the step is obvious because a colorimeter is for determining and specifying colors.

9. Claim 11.

Art Unit: 2672

See rejection of claim 1.

10. Claim 12.

See rejection of claim 1.

11. Claim 13

See rejection of claim 1. “wherein said blending ratio is calculated using a server storing said color data”.

12. Claim 14

See rejection of claims 3 and 4, “further comprising the step of displaying said input data using an input data displaying means”.

13. Claim 15

See rejection of claim 4, “further comprising the step of correcting said color specification values displayed on said input data displaying means”.

14. Claim 16

See rejection of claim 6, “wherein said color data includes data of colorants, resins or applications.”

15. Claims 17 and 18

See rejection of claims 6 and 7, As in claim 17, “further comprising the step of displaying said calculated blending ration of colorants in a blending ratio displaying means”. And in claim 18 “wherein said color data includes data of costs of colorants, a plurality of said blending ratios of colorants are provided and the total cost of each of said calculated blending ratios is calculated based on said data of cost of colorants, and said blending ratio displaying means displays said

Art Unit: 2672

plurality of blending ratios arranged in the descending order or the ascending order in term of said total cost.”

16. Claims 8 and 19.

McGreggor in fig 2, and Tsukada in fig. 11 teach the step of claim 8, “The CCM calculating system as claimed in claim 1, wherein first difference of hues, lightnesses or chromas of said target color and a test sample for toning with one light irradiated is different from second difference of hues, lightness or chromas of said target color and said test sample with another light irradiated, and wherein said system further comprises means for calculating said blending ratio of colorants which may effectively decrease the difference between said first difference and said second difference”, And in claim 19 “wherein first difference of hues, lightness or chroma of said target color and a test sample for toning with one light irradiated is different from second difference of hues, lightness or chroma of said target color and said test sample with another light irradiated, and wherein said blending ratio of colorants is calculated which may effectively decrease the difference between said first difference and said second difference.”

17. Claims 22 and 24,

McGreggor in col. 8, lines 1-33 teaches the step of claim 22.

18. Claims 23 and 25,

Holub in col. 23, lines 26-32 teaches the step of claim 23.

19. Claim 26

See rejection of claim 1.

### ***Conclusion***

Art Unit: 2672

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

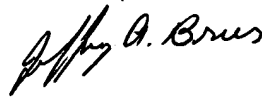
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A. Amini whose telephone number is 571-272-7654. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 571-272-7664. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2672

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEFFERY ZINNER  
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Art Unit 2672

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